#FABCONSQLCON2026

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Microsoft Fabric COMMUNITY CONFERENCE | Microsoft SQL COMMUNITY CONFERENCE

ATLANTA MARCH 16 - 20, 2026

Fabric Development

Repos, Collaboration and Deployments

/mikediehlsqlbi

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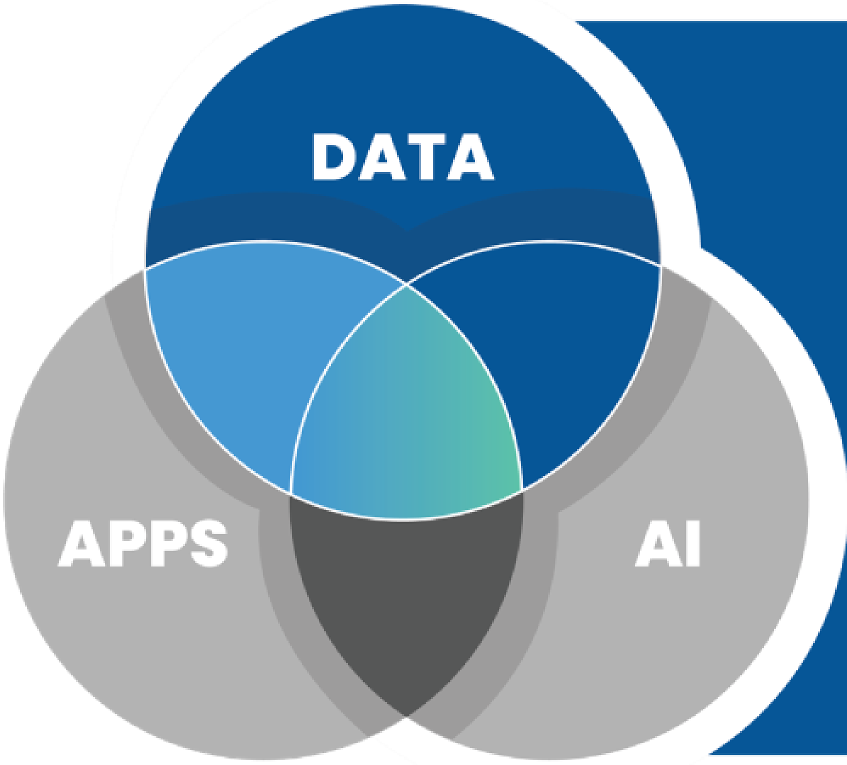
https://github.com/xhead/

improving

It's what we do. ™



Data

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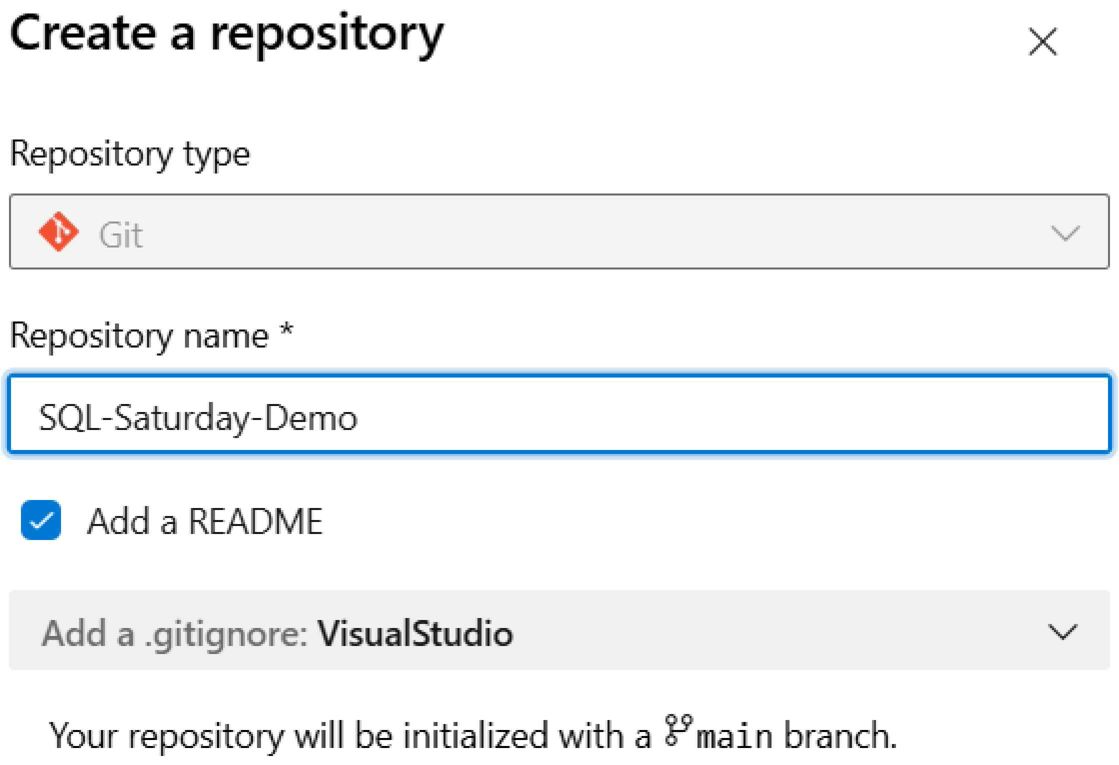
Our Goals for Source Control in Fabric

- Allow developers to:
  - work on the same project at the same time
  - experience fewer pull request conflicts
- Maintain the ability to:
  - Keep every workspace item in a repo
  - Do code reviews during a pull request
  - Have CI builds and releases (source code validation)
  - Rollback to previous releases
- Always know what each environment contains
- History of changes:
  - For the project
  - For Releases

Our Rules for Source Control in Fabric

- The primary DEV workspace is always and only associated to the main branch
- Always work in a feature branch and workspace
- Pull requests approved by one other team member
- DEV workspace must be in a valid state
  - Only reference valid workspace items
  - Pull requests must leave references intact
- Pull requests and deployments
  - validated by a CI build
  - Initial deployment to a CI environment

Source Control & Workspaces



Create a repository

Repository type

Git

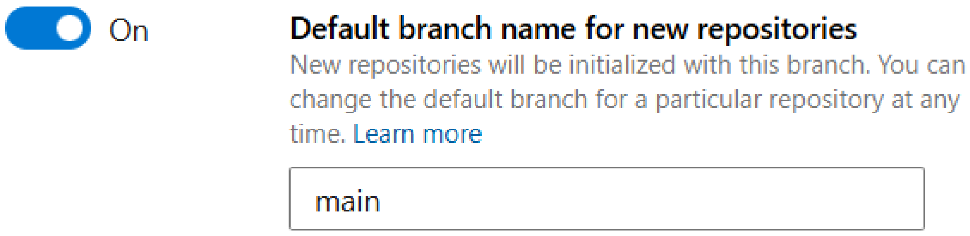
Repository name *

SQL-Saturday-Demo

☑ Add a README

Add a .gitignore: VisualStudio

Your repository will be initialized with a main branch.



On

Default branch name for new repositories

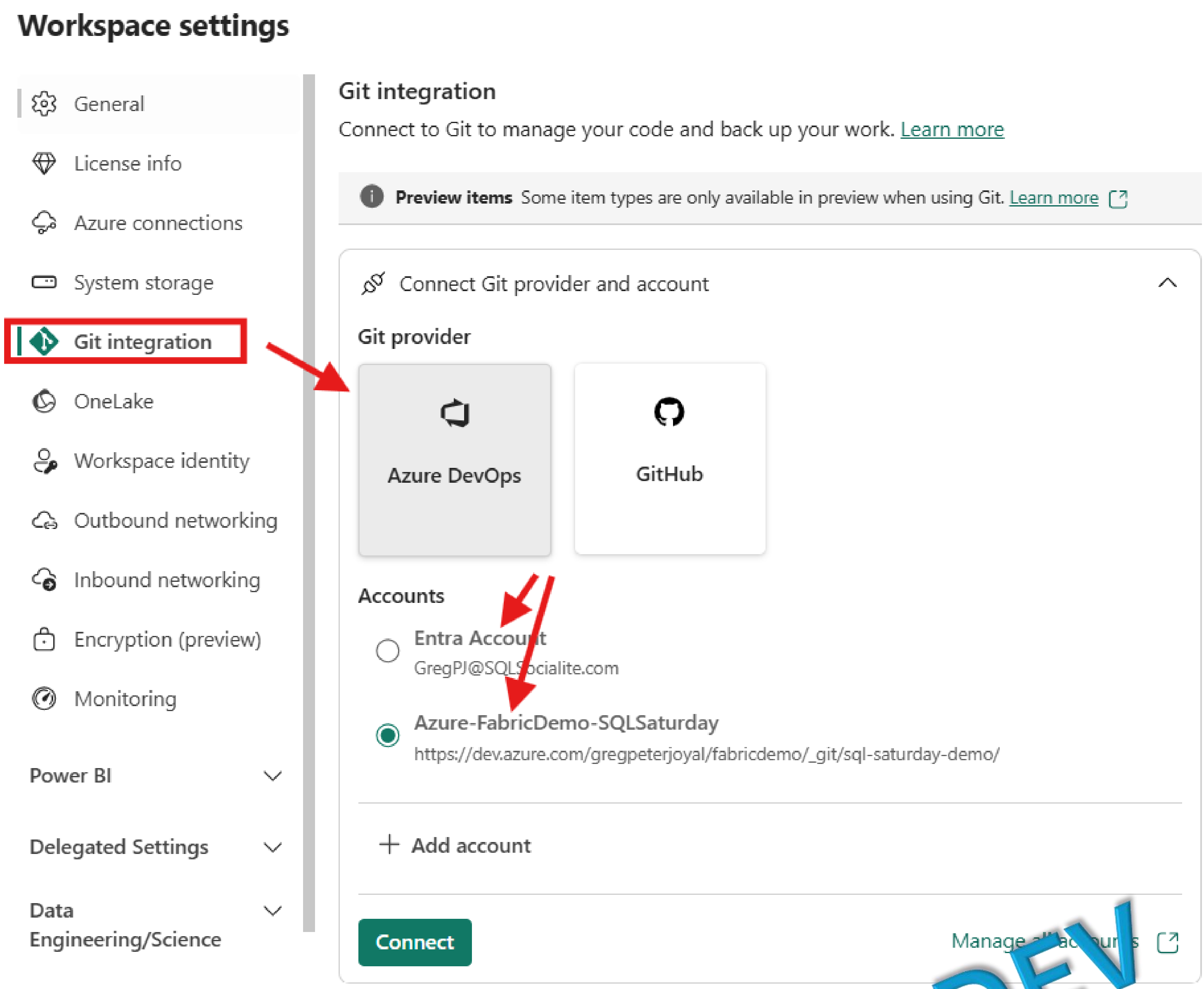
New repositories will be initialized with this branch. You can change the default branch for a particular repository at any time. Learn more

main

- Create a new repository in Azure DevOps
- Consider adding VisualStudio .gitignore if you will use it to manage branch updates and conflict resolution

Source Control & Workspaces

- Open Workspace settings and connect to Azure DevOps
- Can use your EntraID or a pre-configured connection
- Pre-configured connection is in preview.



Workspace settings

- General
- License info
- Azure connections
- System storage
- **Git integration**
- OneLake
- Workspace identity
- Outbound networking
- Inbound networking
- Encryption (preview)
- Monitoring
- Power BI
- Delegated Settings
- Data Engineering/Science

Git integration

Connect to Git to manage your code and back up your work. Learn more

Preview items Some item types are only available in preview when using Git. Learn more

Connect Git provider and account

Git provider

Azure DevOps | GitHub

Accounts

○ Entra Account
GregPJ@SQLSocialite.com

● Azure-FabricDemo-SQLSaturday
https://dev.azure.com/gregpeterjoyal/fabricdemo/_git/sql-saturday-demo/

+ Add account

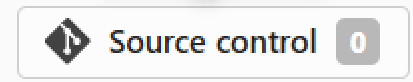
Connect

Manage all accounts

DEV

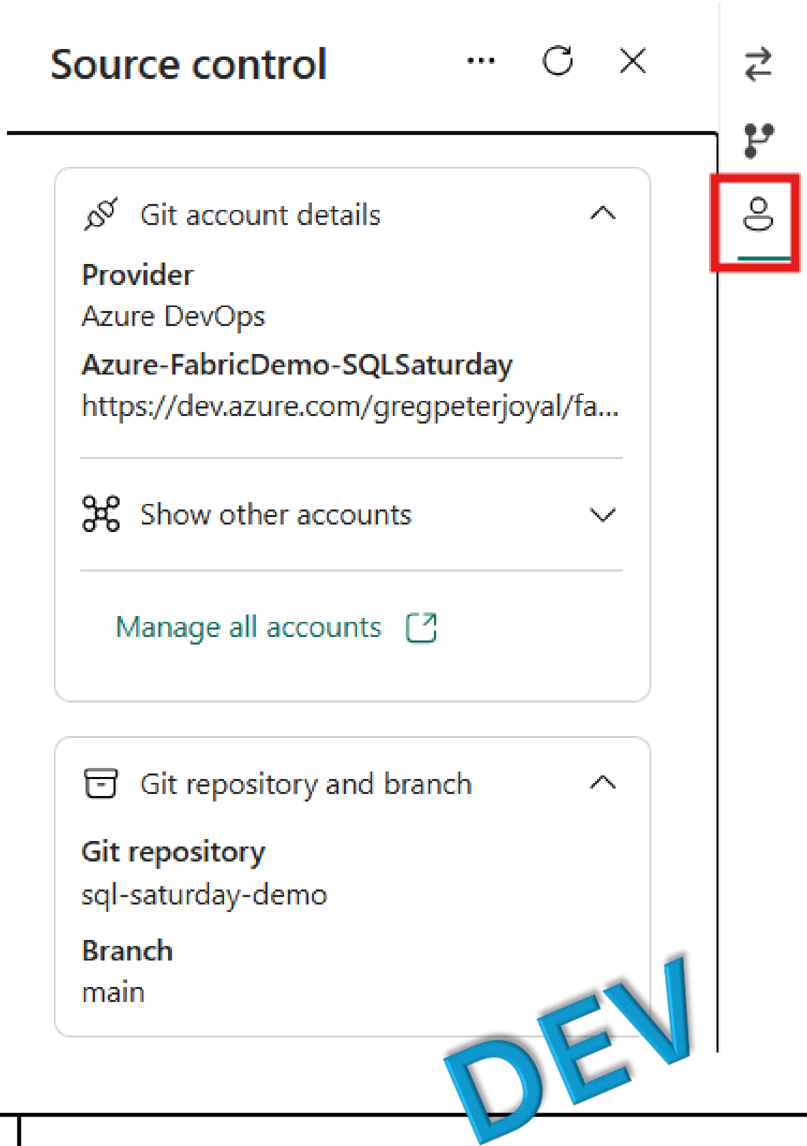
Source Control & Workspaces

- After connecting to Azure DevOps open the Source control pane



Source control 0

- Open the Git account details
- Select your Git repository and branch
- We avoid changing our primary DEV workspace to any other branch



Source control

Git account details

Provider
Azure DevOps

Azure-FabricDemo-SQLSaturday
https://dev.azure.com/gregpeterjoyal/fa...

Show other accounts

Manage all accounts

Git repository and branch

Git repository
sql-saturday-demo

Branch
main

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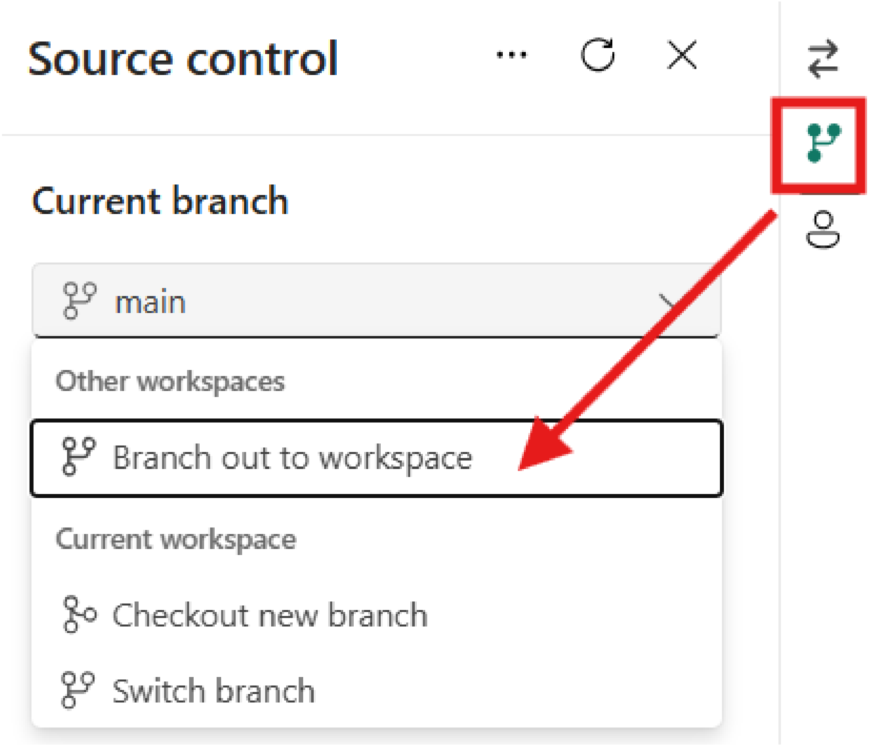
Branching, Pull Requests & Code Reviews

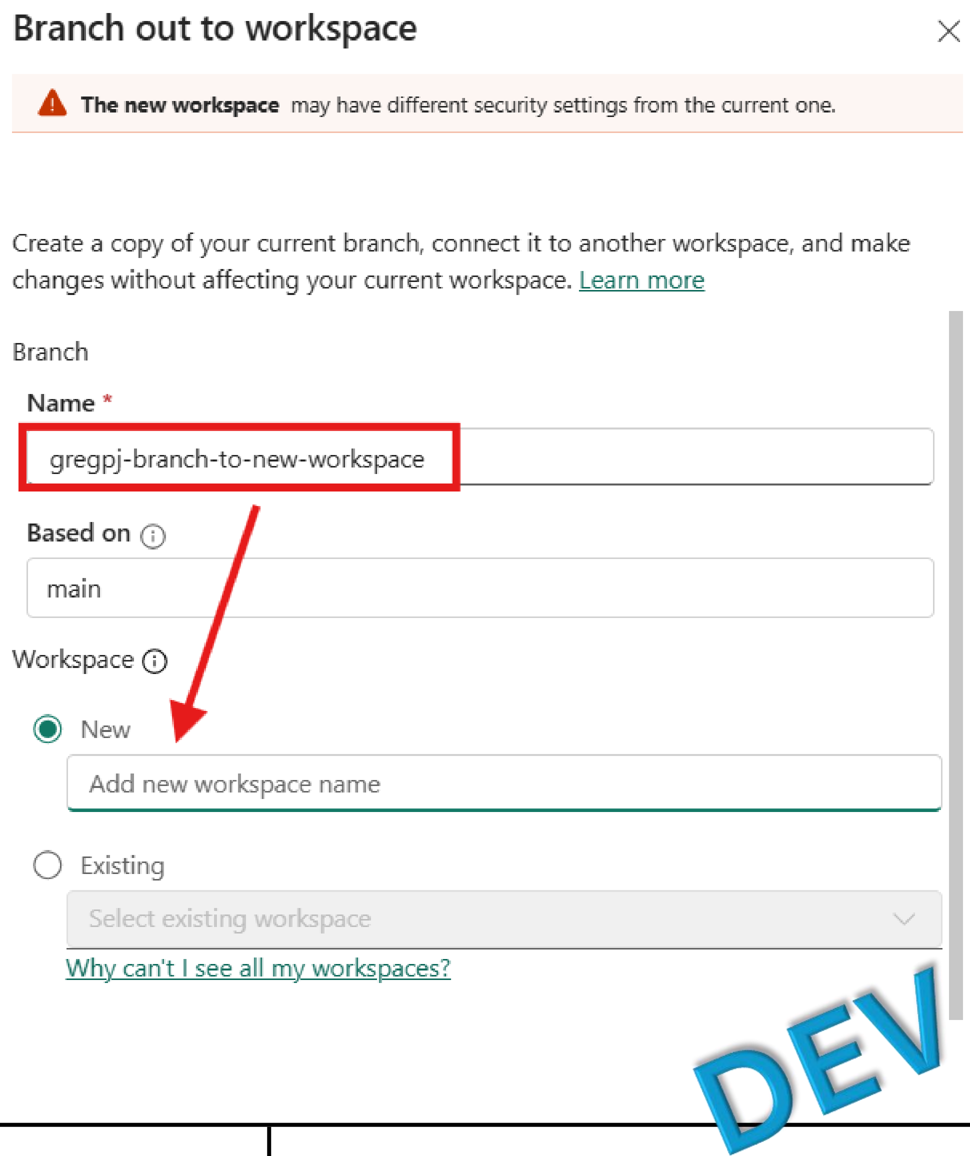
- Open the source control pane
- Under current branch, select the **Branch out to workspace** option
- Checkout new branch:
  - Will create a new repo branch and update the current workspace
- Switch branch:
  - Swaps the workspace to an existing branch
  - All items are refreshed, uncommitted changes may be lost



DEV

Branching, Pull Requests & Code Reviews

- From the Fabric UI you can create a brand new branch in the repo
- Will be based on the currently selected workspace branch
- Create a new workspace, or
  - Good for new developers or if you want to start from scratch
- Re-use an existing workspace
  - Handy to retain existing security setup / existing data



Branch out to workspace

The new workspace may have different security settings from the current one.

Create a copy of your current branch, connect it to another workspace, and make changes without affecting your current workspace. Learn more

Branch

Name *

gregpj-branch-to-new-workspace

Based on ⓘ

main

Workspace ⓘ

● New

Add new workspace name

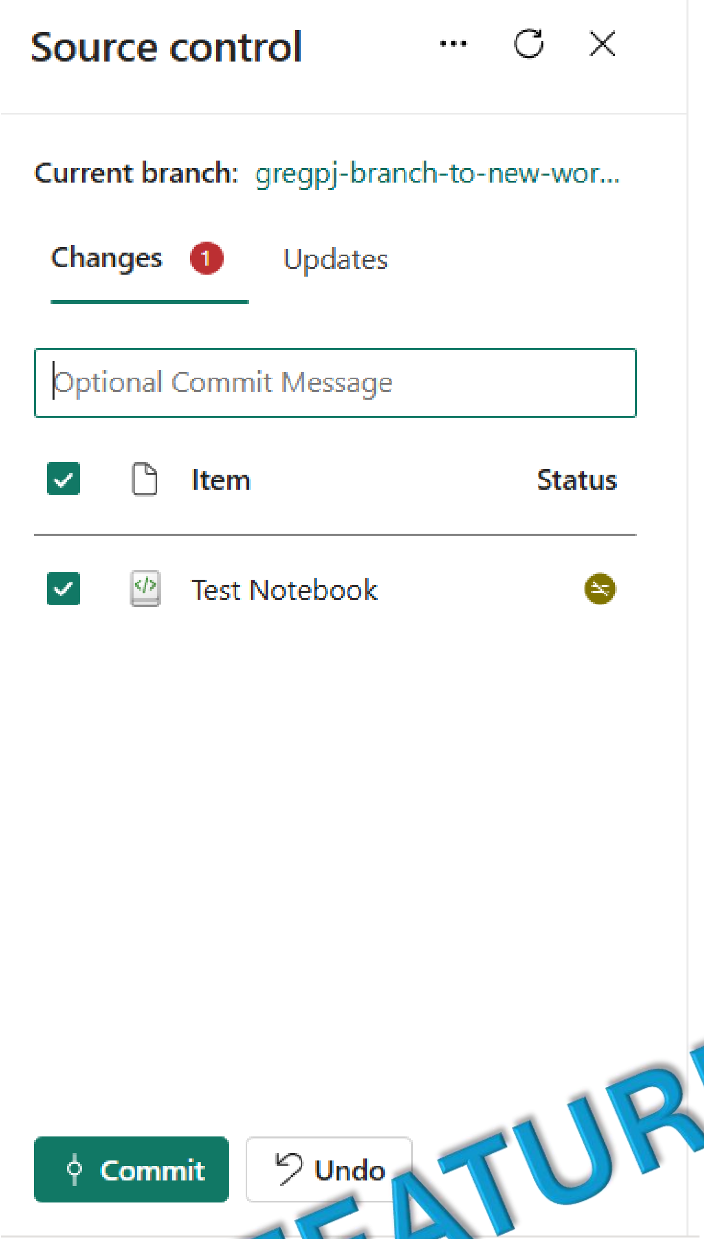
○ Existing

Select existing workspace

Why can't I see all my workspaces?

Branching, Pull Requests & Code Reviews

- The workspace actively tracks changes
- Source control pane offers options to commit or undo individual items
- Commit if you want to create a history step in your branch / repo
- Otherwise not required until you are ready
- **Note**: Lakehouse tables and files are not included in your changes



Source control

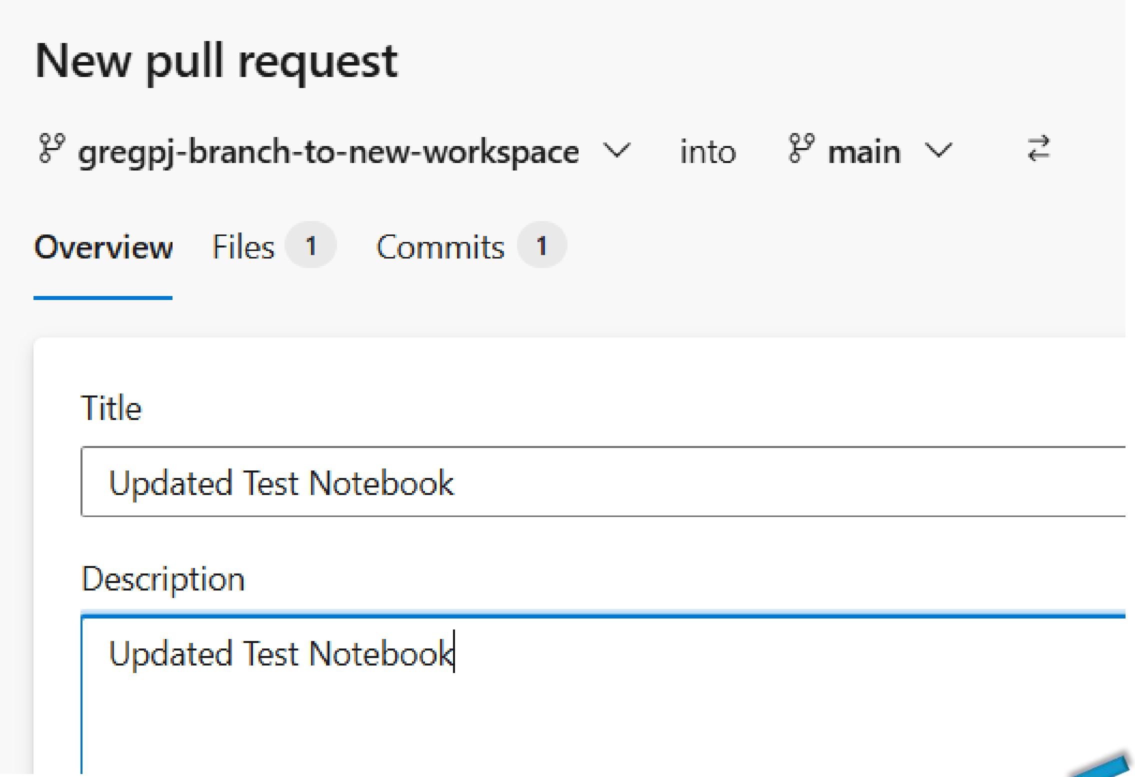
Current branch: gregpj-branch-to-new-wor...

☑	Item	Status
☑	Test Notebook	

FEATURE

Branching, Pull Requests & Code Reviews

- Pull requests must be done through:
  - Azure DevOps in the browser
  - Another tool such as Visual Studio (Code)
- PRs offer the opportunity to:
  - do code reviews
  - do CI builds
  - Squash commits for cleaner source history



New pull request

gregpj-branch-to-new-workspace into main

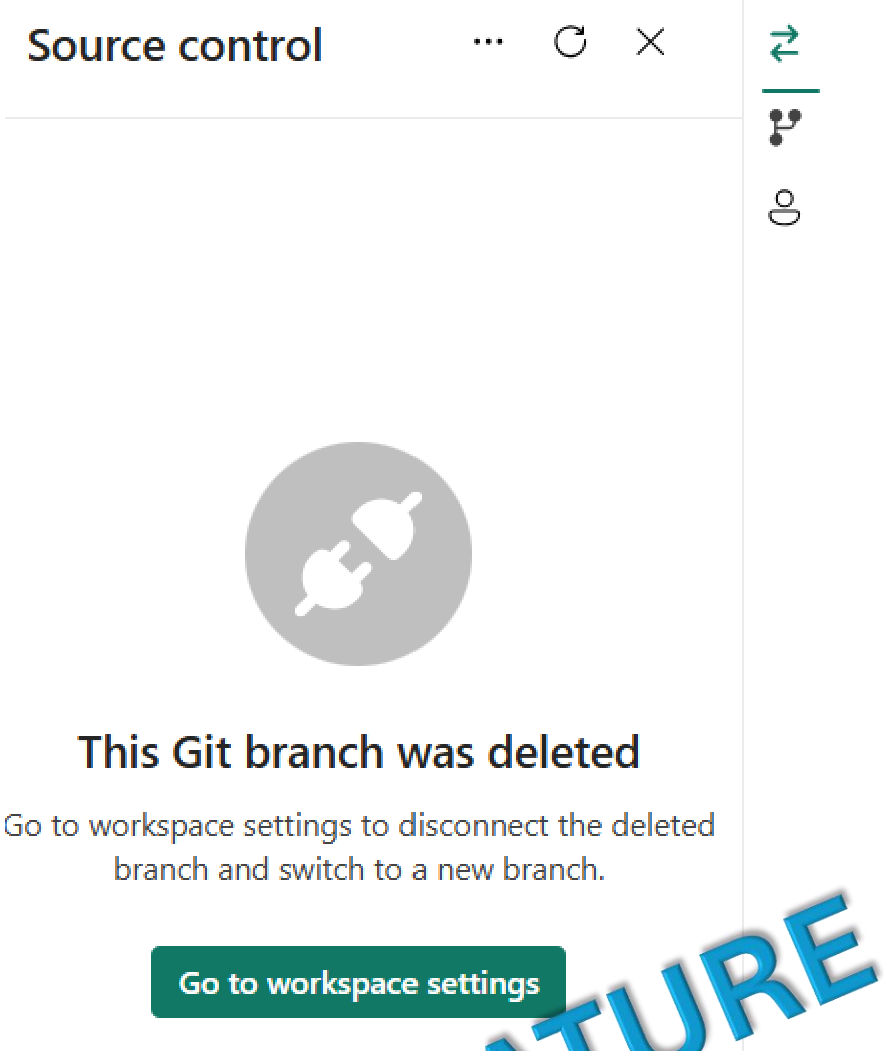
Title: Updated Test Notebook

Description: Updated Test Notebook

FEATURE

Branching, Pull Requests & Code Reviews

- After a successful pull request, workspaces are left intact including the branch name
- Alternate method for re-using workspace:
  - Create a new branch in Azure DevOps
  - Open workspace settings
  - Associate to newly created branch
  - **For Large Repos, Highly Recommended**



Source control

This Git branch was deleted

Go to workspace settings to disconnect the deleted branch and switch to a new branch.

FEATURE

Branching, Pull Requests & Code Reviews

- Its not all roses and sunshine with branches in Fabric…
- Fabric UI does not support 'updating your branch'
- Suggestion 1… Azure DevOps w/Browser
  - Pull request 'main' into your feature branch
  - Supports conflict resolution (sort of)
- Suggestion 2 … Visual Studio (Code) [my preference]
  - Visual Studio has great git support
  - Visual Studio Code is free

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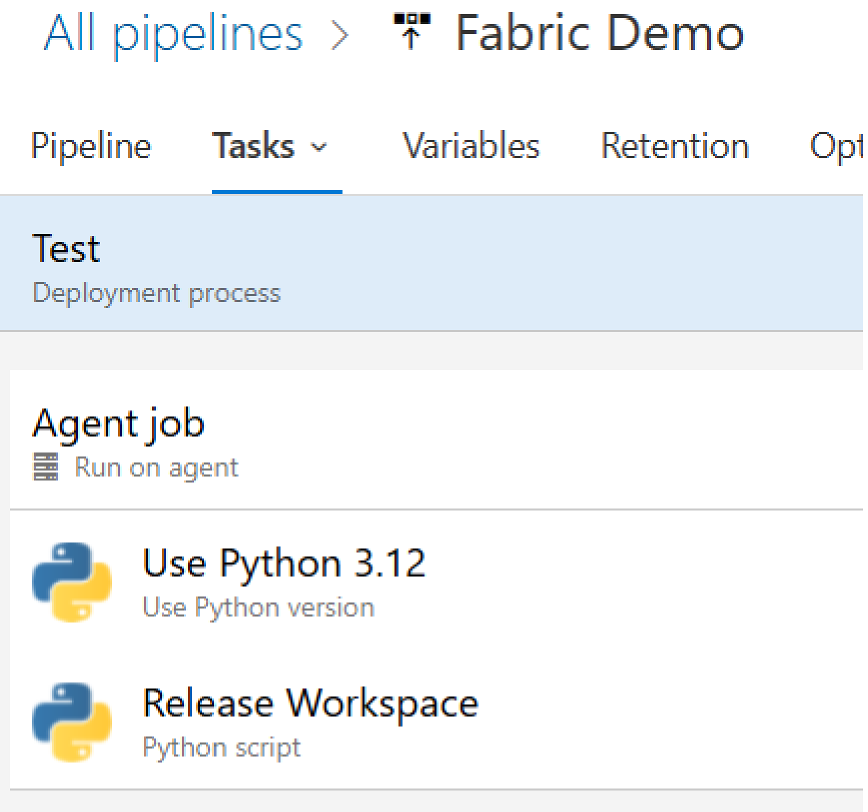
Deployments to Other Environments

- DevOps Release vs Deployment Pipelines
- DevOps releases are:
  - Flexible - Can include other artifacts such as SQL Database Projects
  - Consistent – only items in repo can be released to the other environments
- CI builds offer extra opportunities:
  - Workspace validation (we validate some ID values…)
  - Perform unit tests
  - Can be executed against any branch (i.e. during PRs)
- DevOps has more granular permissions:
  - Approval gates by environment
  - Do not need to be a Fabric Administrator
- Rollbacks are easier and more predictable

Deployments to Other Environments

- Fabric CI-CD https://microsoft.github.io/fabric-cicd/latest/
  - Python library that supports most Fabric items
  - Flexible authentication options (Default, CLI, AZ PowerShell, SPN)
  - Yaml based deployment configurations (optional)
  - Yaml based parameter file for environment-specific values
  - Supports multiple deployment scenarios



All pipelines > Fabric Demo

Test
Deployment process

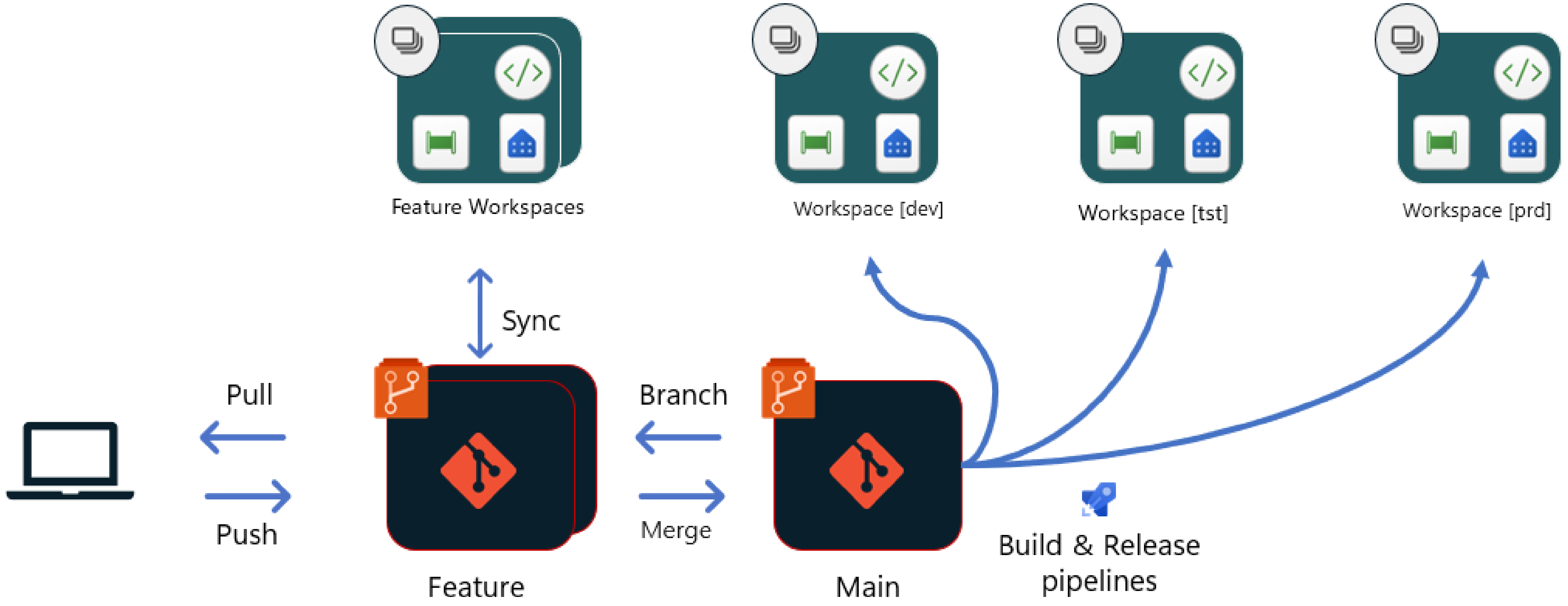
Agent job
Run on agent

Use Python 3.12
Use Python version

Release Workspace
Python script

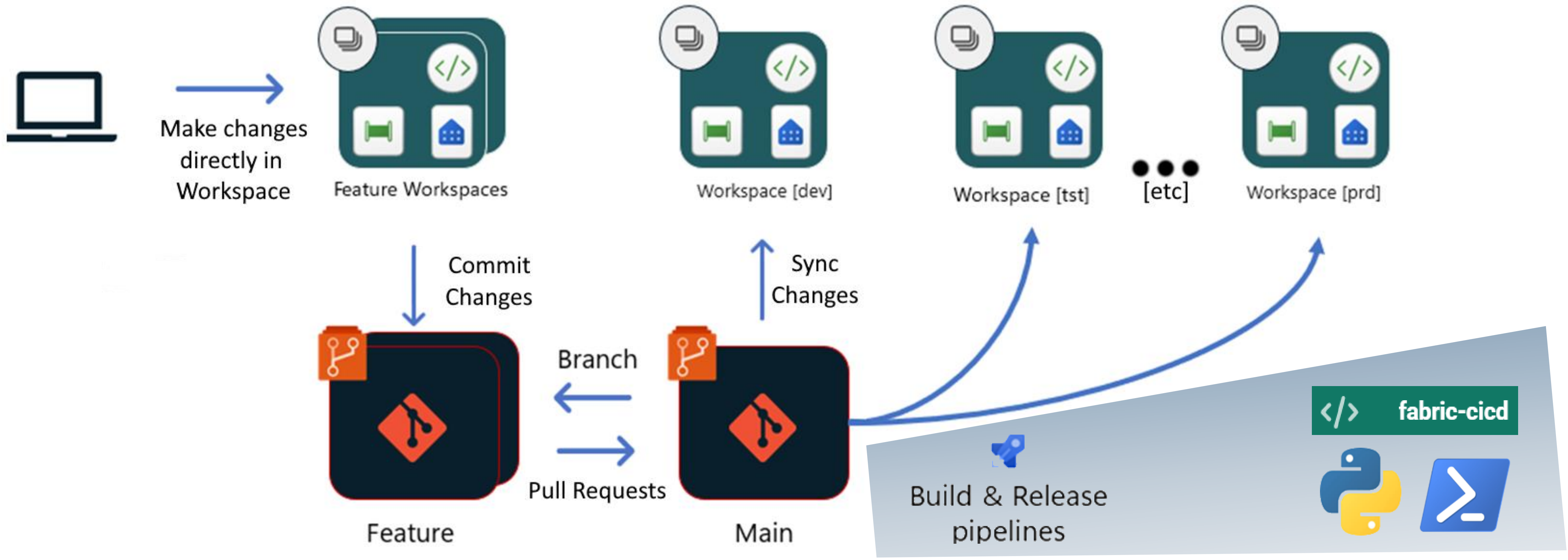
Deployments to Other Environments

- Microsoft suggested Option 2 - Git- based deployments using Build environments



Deployments to Other Environments

- Git- based deployment using Feature Workspaces and Release Pipelines



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Gotchas & Workspace Management

- Renaming objects in Fabric
  - Only the **Display Name** is updated
  - Repository files and folders retain original name
  - You can safely rename them directly in your branch
- Be careful with Default Lakehouse references
  - Branched workspaces will reference original Dev Workspace, Lakehouse
- Can dynamically connect Lakehouse to items
  - Notebooks can use the **%%configure** cell magic command
- *Adopt a standard pattern and enforce during pull-requests*

Gotchas & Workspace Management

- Lakehouse Tables and Files are not repo items
  - Use SQL Endpoint to deploy SQL Database projects
  - Lakehouse Files require custom deployment steps (Fabric Rest API, python DataLakeServiceClient class, etc.)
- Workspaces do not automatically sync with repos
  - Opening workspaces offers a chance to update
  - Deploy DEV as a release stage
- Release using SPN
  - App Registration or Managed Identity
  - As individual may cause issues

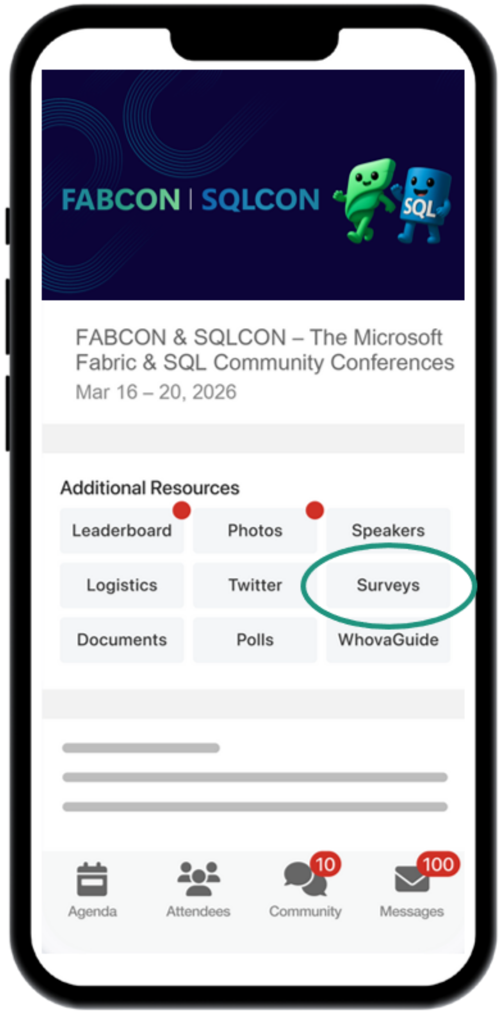
QUESTIONS

ANSWERS

DISCUSSION

How was the session?

Complete Session Surveys in *Whova* for your chance to WIN PRIZES!



FABCON & SQLCON – The Microsoft Fabric & SQL Community Conferences

Mar 16 – 20, 2026

Additional Resources

Sound off.
The mic is all yours.
Influence the product roadmap.

Join the Fabric User Panel

Share your feedback directly with our Fabric product group and researchers.

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Join the SQL User Panel

Influence our SQL roadmap and ensure it meets your real-life needs

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